

cylus gussonii Costa 1829) is predated by *Brondelia* Bourguignat 1862, *Brondelia* will replace the generic name *Williamia* in the Siphonariidae.

CHARACTERS AND CLASSIFICATION—A PRELIMINARY REVIEW OF THE GENERA IN THE SUBFAMILY OCTOPODINAE. Ronald B. Toll, Department of Biology, University of the South, Sewanee, Tennessee.

The subfamily Octopodinae includes the shallow water, common octopuses. The group has gone without a comprehensive systematic revision since Robson's monumental study published in 1929. Uncertainties concerning the validity of many of the genera have resulted in the common, largely uncritical usage of about twelve generic names within the body of octopodine literature. This classification shows strongly skewed levels of monotypicity with *Octopus* comprising well over 100 species and all other genera having five or less nominal species. At least five genera are monotypic.

Preliminary results of a study on the morphologic variability of selected octopodine characters suggest that a substantial number of the genera are invalidly described. The principal problem associated with the present generic classification is the typological concept originally employed to erect many of these taxa. It is now seen that a number of character states used to establish and delineate genera actually represent points along character continua that extend across several genera or the subfamily as a whole.

A review of the genera of octopodines, now underway, should result in a reduction of the number of valid taxa and decreased levels of monotypic skewedness.

SYSTEMATICS OF *GONATUS TINRO* FROM THE SOUTHEASTERN BERING SEA. C. G. Bublitz and T. Nishiyama, Institute of Marine Science, University of Alaska, Fairbanks.

Seven species of oegopsid cephalopods were identified from an examination of 2,244 immature specimens from the southeastern Bering Sea. The species identified included: *Gonatus onyx*, *G. berryi*, *G. madokai*, *G. middendorffii*, *G. tinro*, *Berryteuthis magister* and *B. anonychus*. Of these species, the literature lacks information on the specific characteristics of immature *G. tinro*. Juveniles of *G. tinro* are commonly identified as *B. magister*.

The specific characteristics of immature *G. tinro* were determined from an examination of 181 specimens ranging in size from 6.7 to 68.3 mm PL. The results show that immature *G. tinro* can be separated from other members of the genus on the basis of arm and tentacle armature development. Juvenile *G. tinro* have 5–6 transverse rows of suckers on the oral surface of the tentacular stalk and arm hook development commencing at about 18 mm PL. Club armature maturation starts around 16 mm PL and is completed by 30–35 mm PL. *Gonatus berryi* develops mature club and arm armature at 7–9 mm PL. *Gonatus middendorffii* has four regimented rows of suckers on the proximal portion of the

manus followed by four staggered rows on the oral surface of the stalk.

Separation of *G. onyx* and *G. tinro* in the size range less than 10 mm PL is difficult to make on the basis of sucker counts or morphometrics. Both species from this study had five to six rows of juvenile tentacular stalk suckers with the total number of suckers showing considerable overlap. When enhanced by staining the developing hook bud of *G. onyx* can be distinguished at 8–11 mm PL and is the most reliable method of separation.

Juvenile *Gonatus tinro* and *Berryteuthis* spp. were separated by scanning electron microscopic examination of radulae. The results show that specimens with five to six transverse rows of suckers on the tentacular stalk and arm hook development starting at about 18 mm PL were *G. tinro*. Those specimens with four scattered transverse rows of stalk suckers and no arm hook development evident were *Berryteuthis* spp.

CATALOG OF WORLDWIDE CEPHALOPOD RESOURCES: A PREVIEW. Clyde F. E. Roper and Michael J. Sweeney, National Museum of Natural History, Smithsonian Institution, Washington, D.C.

An annotated and illustrated catalog of the cephalopod species of interest to fisheries around the world has been prepared for publication by the Food and Agriculture Organization of the United Nations (FAO). It includes information on scientific and vernacular nomenclature, synonymy, specific characters, geographic distribution, habitat and biology, and current or potential use as a fishery resource for 172 species (47 sepioids, 89 teuthoids, 34 octopodids, 2 nautiloids). The catalog is available from: Fishery Resources and Environment Division, FAO Fisheries Department, Viale delle Terme di Caracalla, 00100 Rome, Italy.

DISTRIBUTION AND ABUNDANCE OF SQUIDS CAUGHT IN SURFACE GILLNETS IN THE SUBARCTIC PACIFIC, 1977–1981. Tsunemi Kubodera, Nakano-Ku, Tokyo, Japan.

A total of 21,550 squids was obtained from 1,286 gillnets set by Japanese salmon research vessels in the northwestern North Pacific during May to August 1977–1981 and in the Gulf of Alaska in July 1980–1981. Eight species and one genus were identified. *Ommastrephes bartrami*, *Onychoteuthis borealijaponica* and *Gonatopsis borealis* were the most common species, comprising 46%, 33% and 20% of the catch, respectively.

Seasonal changes of distribution and abundance of the three common species in the surface waters of this region were closely correlated with the heating of surface waters and the development of vertical thermal gradients during summer.

G. borealis is distributed broadly in the Subarctic Region from spring to summer; the southern boundary of occurrence shifts to the north by about 4°–5° of latitude during summer. Apparently this species does not form massive schools or large concentrations. *G. borealis* has two